



PSSC 309B

Directed Work in Field and Row Crops

Spring 2012

Instructor: J.R. Gallagher

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Office: Farm Office

Phone: (530) 898-6465

Office Hours: By appointment

Discussion Schedule: Monday 5:00 – 5:50 pm Farm 001

Activity Schedule: TBA, Student arranged times

Monday - Friday 8:00 am – 4:30 pm Farm

Saturday 8:00 am – 4:30 pm Farm

Finals Schedule: Monday, May 14th 6:00 – 7:50 pm Farm 001

Reference Text:

Martin, J. H., W. H. Leonard, D. L. Stamp, R. Waldren. 2006. **Principles of Field Crop Production, 4th Edition.** Prentice Hall

Course Content:

Directed work and discussion on all spring aspects of field and row crop production practices applicable to northern California. 1.0 hour discussion, 2.0 hours activity.

This course offers students the opportunity to gain practical crop production experience through education and work on an actual producing farm. Students will take an active role in the budget process, land preparation, planting, cultivation, irrigation, fertilization, pest control, harvesting, and sales of the field and row crops grown on the CSU-Chico Agricultural Teaching and Research Center (University Farm). As a result of this experience the student should be instilled with a sense of appreciation for the importance of proper timing and performance of each necessary operation throughout the production season. The student should become aware of the implications of weather, pests, and economic factors upon the success of a crop.

Prerequisite:

PSSC 309A (*includes PSSC 101 Introduction to Plant Science*) or faculty permission

Recommended Prerequisite:

AGET 150 Agricultural Machine Systems

Course grading:	Discussion Attendance	140	pts
	Discussion Assignments	60	pts
	Discussion Final	100	pts
	<u>Activity</u>	<u>300</u>	<u>pts</u>
	Total:	600	pts

Grade Scale: 90% = A; 80% = B; 70% = C; 60% = D <60 = F

Specifics:

- The student crops project operates as a cooperative, with each student having a vested interest in the farm's success. The cooperative approach insures that all students gain practical crop production experience on every field and row crop grown at the ATRC. At the completion of the cropping season, each of the vested students is eligible to earn up to \$1000.00 on the crops project after all production costs are paid.
- Discussion hours are scheduled to inform students of important points, procedures, or conditions involved with growing particular crops and to discuss problems as they arise during the progress of the projects.
 - Discussion attendance is mandatory. Attendance will be recorded during each weekly session (14 sessions @ 10 pts/each)
 - Assignments and/or quizzes will be given periodically
 - Defensive Driving Training course completion (20 points)
 - 2 Assignments- to be announced (20 points each)
 - Discussion final will be comprehensive, covering all material discussed in the weekly sessions. The final can not be taken early or made up.
- Supervised activity consists of the field work and training associated with the crop project. I expect 3 hours of supervised activity per week for a 10 week period from each student to earn the maximum points available (Feb 20th – May 12th).
 - Students are responsible for coordinating activity times with the course instructor and Crops Technicians at the ATRC.
 - Activity times will only occur during normal working hours of the ATRC staff (8:00 am - 4:30 pm, Monday through Friday). Under certain circumstances Saturday work maybe authorized. No Sunday work is allowed.
 - Activity grading will be dependant on:
 - Quality and Quantity of work/management performed by the student
 - Reliability of the student
 - Promptness and dependability in filling out necessary paperwork.
 - Ability to learn the skills of the necessary operations (equipment operations, adjustments, calibrations, harvest).
 - Ability to coordinate the operations (secure seed, fertilizer and other supplies).
 - Cooperation with others and the acceptance of advice and supervision.
- Attendance is important. A total of four absences combined (in either discussion or supervised activity) will be considered reason enough for termination of the student in the crops project with a grade of U or F along with forfeiture of all project rights and monies connected with the crops.

Course Requirements and Student Responsibilities

- Students are to provide all labor for the projects. In cases where outside help is needed, such as hand weeding or hand harvest, it will be done only with the permission of the instructor or Crops Technician. All labor shall be paid for by the ATRC and then charged to the project. Most ATRC staff labor is free of charge to the student when they are assisting with project responsibilities.
- Sign PDR (tax form) and volunteer employee form. This is to be done before work is started on the projects.
- **All students must be registered in the class for the duration of the crop project (this means Fall and Spring) to be considered vested. In all cases the projects will span more than one semester. Dropping the class, failure to register or attend constitutes forfeiture of all rights to the projects.**
- Bearing in mind that the ATRC is a functioning farm and the student crop projects are for instructional purposes it must be understood by the student that the University will have complete control in matters of supervision, inspection, acreage allocation, crop rotation, policy and adherence to the course requirements. As such, the instructor has the right to perform or cause to have performed any necessary operation that has not been taken care of by the project students through neglect or mismanagement. All costs incurred by this type of action will be charged against the crops project involved.
- **Certain students beginning their first project will be required to meet for a series of orientation equipment familiarization, and field procedures sessions. These sessions will be held at times and places designated by the instructor or Crops Technicians.**
- Authorized supervision is required at all times for all crop work. Safety is most important and will be stressed in all operations. Do not operate any equipment or use any pesticides without thorough instruction and prior approval. ATRC staff or students hired by the ATRC may also assist and supervise project students when necessary.
- Operate equipment and use pesticides in a safe manner at all times. Only the Crops Supervisor or the Instructor can allow other riders on equipment that has a seat which will accommodate a rider.
- Perform all project operations and business transactions at the proper time and according to University procedures. Keep your address and phone number correct and current in the ATRC office. Check the filing on your project for accuracy on a monthly basis.
- Make certain all project products are weighed and/or receipted before leaving the ATRC, even if they are to be weighed on delivery. Certified weight tickets from the ATRC are required for all sales off the ATRC.
- *Be in possession of a current California Drivers License and Defensive Driver Training Certificate (or waiver) while operating any State vehicle (including tractors) on County or State roads or highways.*

- Turn all money for the crop into the ATRC office. All checks or drafts are to be made out to the ATRC. The ATRC accountant will see that the enterprise is credited for the proper amount. Make no sales without informing the ATRC office of amounts, buyer's name and address, and date. All products must be paid for in full before leaving the ATRC or be contacted for by a reputable person or company by permission of the instructor or Farm Manager before the product leaves the ATRC.
- Provide your own boots and shovel.
- Rainfall in amounts preventing fieldwork is considered reason for an automatic cancellation of that day's activity. *If you have any doubts about rainfall amounts that prevent fieldwork, call the Crops Technician.*
- Fill out time cards (for equipment or pumps) as soon as you finish the operation or when you have to leave for the day. Refer to the rental rate list, which identifies the equipment. Use the ATRC equipment number which is painted on the equipment to identify it on your time card. Fill it out completely and promptly. *If you wait more than 24 hours you will not earn any hours that day for supervised activity and is considered an absence.* Use required operator, project, operation and equipment numbers on your time cards.
- Familiarize yourself with the irrigation system layout, pump locations and pump oil supplies.
- Periodically check on the progress and condition of the crops. *Walk your fields; this is the only way to really see what is happening there.*
- It is the student's responsibility to report all profits from the project to the Internal Revenue Service.
- All proceeds from sales of crop projects are to be divided on a percentage basis as shown on the sheet entitled "Crop Rental Rates" and vary according to the crop. The division is calculated on the value of the gross production of the crop before any deductions are made. The crop rental amounts thus calculated are to remain with the ATRC. The student will be paid the balance (up to \$1000.00), if any, after all production and harvesting expenses are deducted from the student's share. The ATRC insures the students against personal loss of reasonable cash expenditures connected with his/her project.
- Student payments are typically available in December after final harvest of all the crops projects. *No students can be paid until the crop income has been collected from the buyer or buyers.* Some crops are paid for in two or three installments. As soon as the operating expenses have been covered, then the student can be paid his/her share.
- In cases of contracted crops such as safflower or seed crops, there may be little or no room for negotiations because of standardized pricing procedures. No crop contract shall be made without the authorization of the instructor in charge of crop projects. If a contract is made, a copy must be provided for filing at the ATRC office.
- The ATRC has the first option to retain the rental share of the product from a student crops project or to purchase the whole production from the project. In this case the purchase price shall be at least equal to the going market price for this area.

- Remember that no money shall be paid directly to the student from the purchasers. There are plenty of safeguards, including your vigilance, to assure all income for your project is credited to your account after it is received by the ATRC. This practice is not different from any other farmer who has his crop mortgaged. The lien holder, in this case the ATRC, has first claim.
- No hauling hay off the ATRC by students unless permission is received from the instructor, field supervisor, or Farm Manager. Sell to the animal units or stack and sell to the public through the ATRC office with designated sale times. An involved crops project student or ATRC staff personnel shall be present at the time of sale. Weights and bale counts are required for all sales.
- Hay is to be paid for before it leaves the ATRC unless otherwise authorized by the technician or instructor.
- A record of all information regarding bills, prices, rental charges and other accounting transaction and activity is kept in a file for each student or in a general ledger book. The student has the right to inspect these records for his/her project during regular office hours. None of these records is to ever leave the office except by permission. You can verify most everything in a few minutes without the need of removing them from the room.
- The ATRC accountant is responsible for the student crops project record. The project students are to follow instructions and abide by the rules and policies established by the office personnel and the instructor in charge of the student projects.
- All crops projects will be assessed a charge of \$4.00/acre for an ongoing liming program, \$5.00/acre for irrigation facilities, and \$6.00/acre for land establishment improvements (such as ripping and laser leveling).
- Project students are responsible for cleaning up all materials and tools used during their supervised activity period.
- If you have a disability that requires special accommodations, you must contact a counselor at Disability Support Services, Building E, Room 107 (530) 898-5959. In addition, please let me know as soon as possible and I will provide you with the information you will need to receive services.
- Students are responsible for handling the necessary paperwork for adding or dropping this class. University guidelines for dropping classes are strictly adhered to.

Altering Course Status

Requesting “No Grade of Record” (NGR), alterations in Credit/No-Credit status or withdrawing from the course is the student’s responsibility, as is attending to the necessary paperwork and timelines except where required of the instructor by university policy.

If student does not withdraw, and does not attend class or complete required work, an “F” will be reported for their grade. Instructors may drop a student or issue a “W” for those students who do not attend the first two classes. Students should never assume that

instructors automatically drop students from their class. After the 2nd week of instruction, withdrawal (W) is permitted only for extenuating circumstances.

Requesting an Incomplete (“I”): A student must have a passing grade at the time they request an incomplete from the instructor, who at their discretion may or may not award and incomplete as the grade. If it is awarded, the student must complete all remaining coursework in the following semester. An incomplete is not given because a student is unable or unwilling to keep pace with the requirements of a course.

Adding this Class: For students not currently enrolled in this class, for the first week of class student may continue to enroll in open classes without an add authorization number. For closed classes, students must attend the class to obtain and add authorization number from the instructor prior to registration. Add cards and Add Authorization Numbers are available from the class instructor.

Expected Student Behavior in the Classroom

- Students are expected to turn off all pagers, cell phones and other electronic devices during class time.
- Students are expected to pay attention and participate in class meetings.
- Students may not read other materials (newspapers, magazines) during class.
- Students are to remain in class during the entire session with the exception of breaks. Students are not allowed to come and go during the class session.
- All class participants are expected to exhibit respectful behavior to other students and the instructor.
- All students have the right and privilege to learn in the class, free from harassment and disruption. Inappropriate or disruptive behavior will not be tolerated, nor will lewd or foul language.

The class follows the standards set in the *Code of Students Rights and Responsibilities (EM 96-38)* and students are subject to disciplinary action for violation of that code.

Academic Conduct and Appealing Grades:

If there is evidence that you have been involved in any form of academic dishonesty, you will receive an “F” grade for the course, be locked from WebCT, and a report will be provided to Student Judicial Affairs for further action. This includes cheating on exams and submitting work that is not your own.

If a student feels an error in grading has been made, the student has one week from the time of the assignment is returned to them (or the grade is posted on the web, whichever is later) to request a review of the grade. A written request attached to the original assignment must include a specific statement as to what is in error, how it should be corrected, and what supporting evidence is available.

Discussion Outline

<u>Week:</u>	<u>Date</u>	<u>Topic</u>	<u>Reading</u>
1	Jan 23	Introduction	
2	Jan 30	Farm tour/ Safety	<i>(Take Defensive Driving Course)</i>
3	Feb 6	Weed Identification	<i>(Take Defensive Driving Course)</i>
4	Feb 13	Integrated Vegetation Management Systems	handout
5	Feb 20	Sprayer Calibration	handout
6	Feb 27	Fertility	
7	Mar 5	No Class	
8	Mar 12	Fertilizer Placement and Calibration	handout
9	Mar 19	SPRING BREAK- NO CLASS	
10	Mar 26	Row Crop Planter Calibration	handout
11	Apr 2	Pest and Disease Control	handout
12	Apr 9	Irrigation Methods/ Technology	handout
13	Apr 16	Cultivation	handout
14	Apr 23	Seed Crop Production- Guest Speaker	handout
15	Apr 30	Hay and Silage Harvest and Storage	handout
16	May 7	Grain Harvest and Storage	handout
17	May 14	FINAL EXAM	6:00 – 7:50 pm Farm 001

Schedule may change if there are opportunities that can be taken advantage of. You will be notified in advance if at all possible.

Defense Drivers Training

The CSU Vehicle Use Policy requires that employees complete a Defensive Driver Training (DDT) course every four years to drive a state vehicle or privately-owned vehicle on state business.

For an updated schedule of Defensive Drivers Training dates, please refer to www.csuchico.edu/ehs/

DATE	DAY	START	END	LOCATION
1/25/12	W	2:00 PM	4:00 PM	MLIB Studio A
2/2/12	TH	2:00 PM	4:00 PM	MLIB Studio A
2/7/12	T	10:00 AM	12:00 PM	MLIB Studio A

Contact the CSU, Chico Department of Environmental Health and Safety at 530-898-5126 to reserve your spot. Register ASAP, as the classes fill up quickly.